

Technical sheet :

# MSI 25 ST5

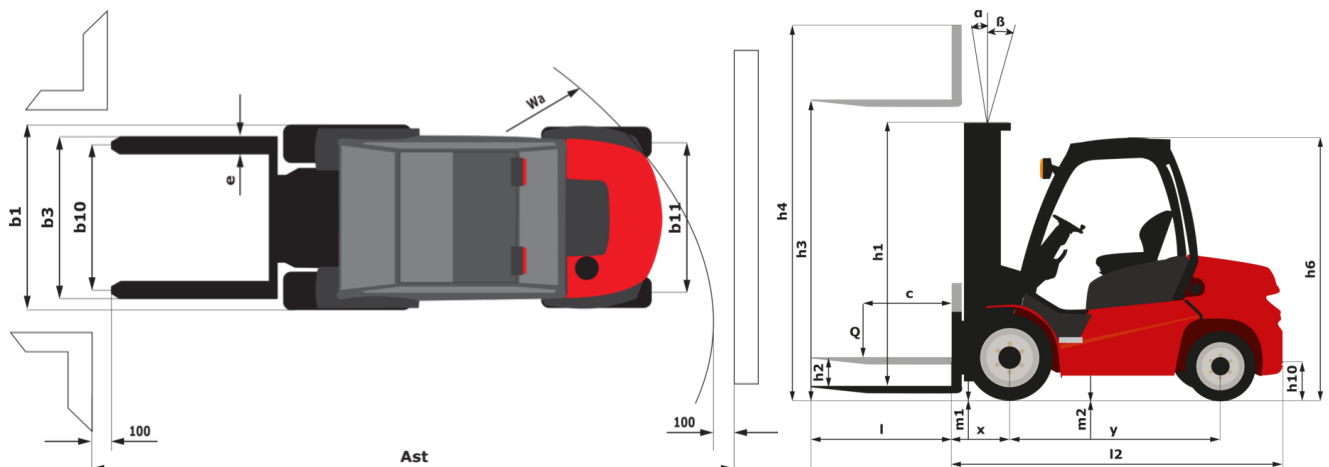
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|       | Technical characteristics                               |           | Metric                               |
|-------|---|-----------|--------------------------------------|
| 1.1   | Manufacturer  |           | Manitou                              |
| 1.2   | Model Name  |           | MSI 25 ST5                           |
| 1.3   | Power source  |           | Diesel                               |
| 1.4   | Operator type   |           | Seated                               |
| 1.5   | Max. capacity   | Q         | 2500 kg                              |
| 1.6   | Load center of gravity                                  | c         | 500 mm                               |
| 1.8   | Load distance, centre of drive axle to fork             | x         | 621 mm                               |
| 1.9   | Wheelbase   | y         | 1900 mm                              |
|       | Standard mast reference of the machine                  |           | FVD 33                               |
|       | Weight  |           |                                      |
| 2.1   | Service weight  |           | 3900 kg                              |
| 2.2   | Weight on front axle (laden) / rear axle (laden)        |           | 5730 kg / 670 kg                     |
| 2.3   | Weight on front axle (Unladen) / rear axle (Unladen)    |           | 1590 kg / 2310 kg                    |
|       | Wheels  |           |                                      |
| 3.1   | Tires type  |           | Pneumatic                            |
| 3.2   | Dimensions of front wheels                              |           | 300-15/18 6T P43                     |
| 3.3   | Dimensions of rear wheels                               |           | 7.00-12/12 ED PLUS                   |
| 3.5   | Number of front wheels / rear wheels                    |           | 2 / 2                                |
| 3.5.2 | Number of drive wheels                                  |           | 2                                    |
| 3.6   | Front wheel gauge                                       | b10       | 1044 mm                              |
| 3.7   | Rear wheel gauge  | b11       | 1108 mm                              |
|       | Dimensions  |           |                                      |
| 4.7   | Height of overhead guard (cabin)                        | h6        | 2095 mm                              |
| 4.8   | Seat height/stand height                                | h7        | 972 mm                               |
| 4.19  | Overall length  | l1        | 4193 mm                              |
| 4.20  | Length to face of forks                                 | l2        | 2993 mm                              |
| 4.21  | Overall width   | b1        | 1330 mm                              |
| 4.22  | Forks section / width / length                          | s / e / l | 40 mm x 100 mm x 1200 mm             |
| 4.23  | Fork carriage ISO 2328 (class/form) A/B                 |           | 2A                                   |
| 4.24  | Fork carriage width                                     | b3        | 1260 mm                              |
| 4.31  | Ground clearance below mast                             | m1        | 260 mm                               |
| 4.32  | Ground clearance at centre of wheelbase                 | m2        | 238 mm                               |
| 4.33  | Aisle Width for pallets 1000 x 1200 crossways           | Ast       | 4641 mm                              |
| 4.35  | Turning radius  | Wa        | 2620 mm                              |
|       | Performances  |           |                                      |
| 5.1   | Travel speed (laden / unladen)                          |           | 21 km/h-21 km/h                      |
| 5.2   | Lifting speed (laden / unladen)                         |           | 0.50 m/s-0.50 m/s                    |
| 5.3   | Lowering speed (laden / unladen)                        |           | 0.50 m/s-0.30 m/s                    |
| 5.5   | Drawbar pull (Laden)                                    |           | 1900 daN                             |
| 5.7   | Gradeability (laden)                                    |           | 31 %                                 |
| 5.10  | Service brake   |           | Hydraulic brakes by loss of pressure |
|       | Transmission type                                       |           | Hydrostatic                          |
|       | Engine  |           |                                      |
| 7.1   | Engine brand / model / norm                             |           | Kubota / D1803 CRT E5B / Stage V     |
| 7.2   | I.C. Engine power rating                                |           | 37 kW                                |
| 7.3   | Rated speed   |           | 2700 rpm                             |
| 7.4   | Number of cylinders / Capacity of cylinders             |           | 3 - 1826 cm³                         |
|       | Miscellaneous   |           |                                      |
| 8.1   | Type of drive control                                   |           | Electronic                           |
| 8.2   | Working hydraulic pressure for attachments              |           | 220 bar                              |
| 8.3   | Oil flow rate for attachments                           |           | 45 l/min                             |
| 8.4   | Sound level at the driver's ear according to DIN 12 053 |           | 81 dB                                |

## MSI 25 ST5 - Dimensional drawing



## Characteristics of masts and residual capacities

| Full Visibility Duplex (FVD)                              |    | FVD 30 | FVD 33 | FVD 37 | FVD 40 | FVD 45 |
|---|----|--------|--------|--------|--------|--------|
| $\alpha$ - Mast/fork carriage tilt, forward               | °  | 12     | 12     | 12     | 12     | 12     |
| $\beta$ - Mast/fork carriage tilt, backward               | °  | 10     | 10     | 10     | 10     | 10     |
| h1 - Mast lowered height                                  | mm | 2136   | 2286   | 2546   | 2736   | 2986   |
| h2 - Mast free lift                                       | mm | 85     | 85     | 85     | 85     | 85     |
| h3 - Mast lifting height                                  | mm | 3000   | 3300   | 3700   | 4000   | 4500   |
| h4 - Mast extended height                                 | mm | 3738   | 4038   | 4438   | 4738   | 5238   |
| Residual capacity at max height                           | kg | 2500   | 2500   | 2500   | 2500   | 2500   |
| Residual capacity with hooked-on side shift at max height | kg | 2500   | 2500   | 2500   | 2500   | 2500   |
| Height at max capacity                                    | mm | 3000   | 3300   | 3700   | 4000   | 4500   |
| Height at max capacity with hooked-on sideshift           | mm | 3000   | 3300   | 3700   | 4000   | 4500   |

| Free Lift Triplex (FLT)                                   |    | FLT 34 | FLT 37 | FLT 40 | FLT 43 | FLT 47 | FLT 55 | FLT 60 |
|---|----|--------|--------|--------|--------|--------|--------|--------|
| $\alpha$ - Mast/fork carriage tilt, forward               | °  | 12     | 12     | 12     | 12     | 12     | 6      | 6      |
| $\beta$ - Mast/fork carriage tilt, backward               | °  | 10     | 10     | 10     | 10     | 10     | 6      | 6      |
| h1 - Mast lowered height                                  | mm | 1936   | 2036   | 2136   | 2286   | 2386   | 2736   | 2986   |
| h2 - Mast free lift                                       | mm | 1183   | 1283   | 1383   | 1483   | 1633   | 1893   | 2083   |
| h3 - Mast lifting height                                  | mm | 3400   | 3700   | 4000   | 4300   | 4700   | 5500   | 6000   |
| h4 - Mast extended height                                 | mm | 4184   | 4484   | 4784   | 5116   | 5484   | 6356   | 6916   |
| Residual capacity at max height                           | kg | 2500   | 2500   | 2500   | 2500   | 2500   | 2300   |        |
| Residual capacity with hooked-on side shift at max height | kg | 2500   | 2500   | 2500   | 2500   | 2500   | 2300   |        |
| Height at max capacity                                    | mm | 3400   | 3700   | 4000   | 4300   | 4700   | 5200   | 2500   |
| Height at max capacity with hooked-on sideshift           | mm | 3400   | 3700   | 4000   | 4300   | 4700   | 5200   |        |

| Full Visibility Triplex (FVT)               |    | FVT 33 |
|---|----|--------|
| $\alpha$ - Mast/fork carriage tilt, forward | °  | 12     |
| $\beta$ - Mast/fork carriage tilt, backward | °  | 10     |
| h1 - Mast lowered height                    | mm | 1826   |
| h2 - Mast free lift                         | mm | 72     |
| h3 - Mast lifting height                    | mm | 3300   |
| h4 - Mast extended height                   | mm | 4027   |
| Height at max capacity                      | mm | 2500   |



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